SYSTEM AND METHOD FOR EFFICIENTLY FORWARDING CLIENT REQUESTS FROM A PROXY SERVER IN A TCP/IP COMPUTING ENVIRONMENT

Abstract

5   A system and method for efficiently forwarding client requests from a proxy server in a TCP/IP computing environment is described. A plurality of transient requests are received from individual sending clients into a request queue. Each request is commonly addressed to an origin server. Time estimates of TCP overhead, slow start overhead, time-to-idle, and request transfer time for

10   sending the requests over each of a plurality of managed connections to the origin server are dynamically calculated, concurrent to receiving and during processing of each request. The managed connection is chosen from, in order of preferred selection, a warm idle connection, an active connection with a time-to-idle less than a slow start overhead, a cold idle connection, an active connection with a

15   time-to-idle less than a TCP overhead, a new managed connection, and an existing managed connection with a smallest time-to-idle. Each request is forwarded to the origin server over the selected managed connection.